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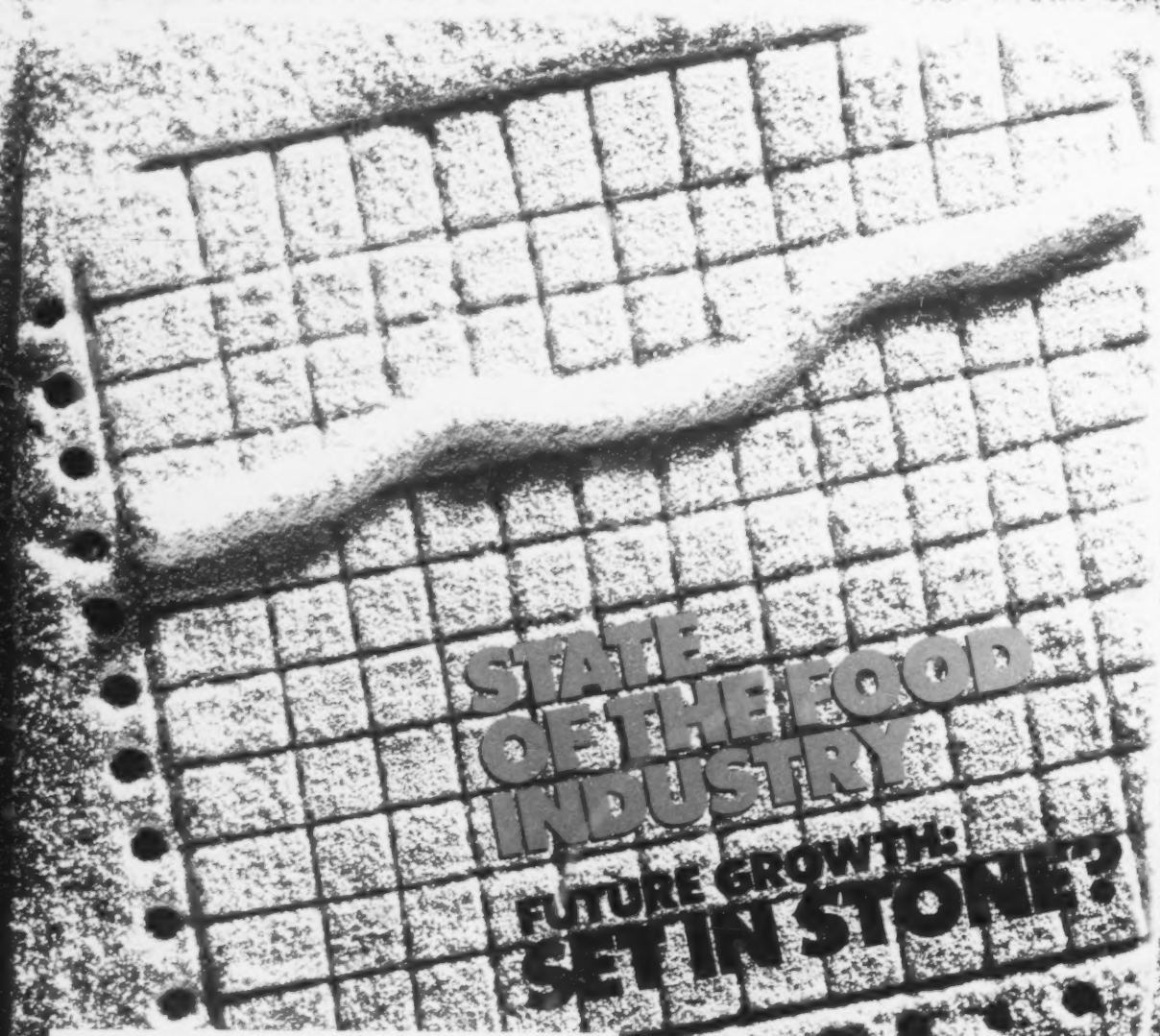

STATE OF THE FOOD INDUSTRY

FUTURE GROWTH: SET IN STONE?

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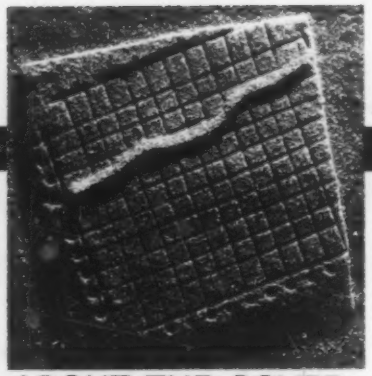

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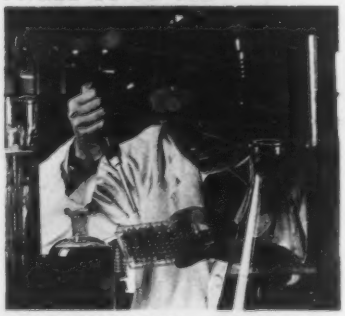

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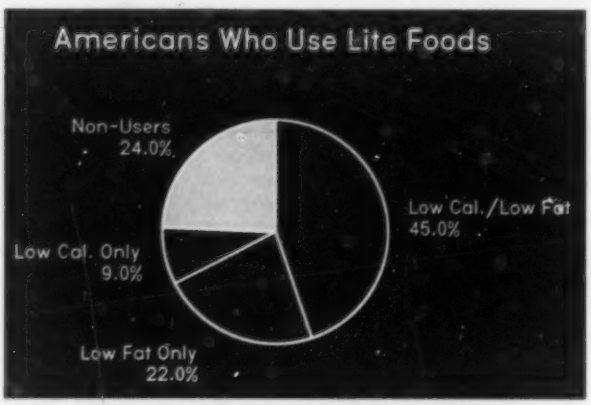
The lite food generation

It's official: low-calorie foods have infiltrated every sector of American society. "In 1991, you are an atypical consumer if you don't use a low-calorie product," said Bob Gelardi of the Calorie Control Council. Gelardi discussed the results of the Council's study at the 1991 Lite Forum sponsored by Pfizer, April 4 in New York City.



Only 24 percent of Americans do not regularly use reduced-calorie or reduced-fat foods. (Source: Calorie Control Council.)

141 million consumers purchase low-fat or low-calorie products, *but only one-third say they are dieting. Low-fat foods are used to maintain good health and an attractive appearance, according to the study. Women are more likely than men to buy lite foods (72 percent vs 61 percent), purchasing lite dairy products most often. Meanwhile, the number of women using lite foods has been rising significantly since 1986. The elderly population of lite food users is also booming. The Council found a 62 percent increase in users from just five years ago.*

Fuel from food wastes

Genetically-engineered bacteria are now capable of converting wastes generated by the agriculture, dairy and brewing industries into ethanol. The bacteria, developed at the University of Florida by Dr. Lonnie Ingram, are now produced by BioEnergy International of Gainesville, FL. Using ordinary wastes such as corn stover (stalks and cobs) as a substrate, the fermentation process is capable of generating ethanol at less than half the cost of current processes. Thus, ethanol will be an economically competitive alternative to gasoline.

Typical agricultural wastes like corn stover can now be used to generate ethanol. (Source: University of Florida Information Services.)

The U.S. Department of Energy estimates that ethanol will eventually replace 50 percent of the 110 billion gallons of gasoline consumed annually in this country. And farmers should benefit from the new development—they will be paid for both their corn and their stover.

If You Read It You Can Win

Keep your eyes peeled for Food Engineering's *annual "Read-it-and-Win" contest this July. This could be your chance to win prizes, while achieving fame and fortune, just by answering some simple questions. (Well, it's a chance to win prizes, the fame and fortune are up to you.) Those readers answering every question correctly will be entered in a prize drawing. You'll find an entry form, along with a description and rules, in July's issue. Good luck, and remember...if you read it, you can win!*

STATE OF THE FOOD INDUSTRY

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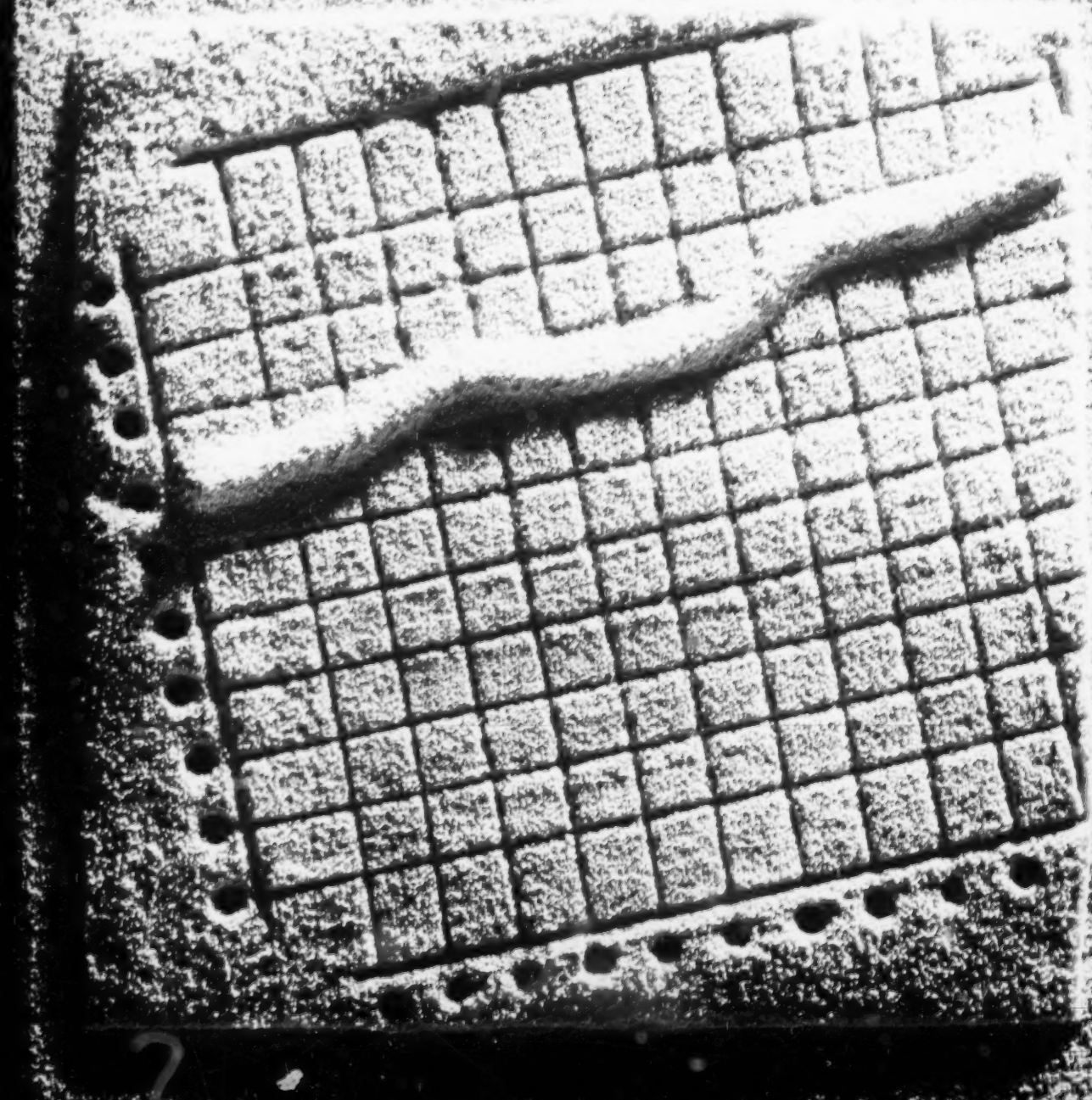
The food industry struggles to shape the future of a saturated market by turning to surgical marketing and the potential for overseas growth.



STATE OF THE FOOD INDUSTRY

The food industry posted an eleventh consecutive year of growth with sales of $383.7 billion in 1990, up from $353.5 billion in 1989, according to the *U.S. Industrial Outlook*, published by the U.S. government. Through new product introductions, food companies continue to court a saturated market. However, finding new markets has become a top priority for most companies. One strategy has been to market within the U.S. differently, while another line of attack has been to investigate international markets that are just beginning to open, such as the Pacific Rim and Eastern Europe.

To get the most from mature markets at home, food companies have been advised to turn to "surgical marketing." Rather than settle for micro marketing's focus on regional markets, advertising on cable television, and special interest publications, surgieal marketing is much more ambitious in zeroing in on potential customers through the use of zip code markets, direct response mail, and concentrating on individual stores within chains.

"Availability of new data will force businesses to change not only the way they market, but the way they manage their business. Retailers and competitive pressure will demand it. Very efficient marketing will be required to maximize return of resources. The name of the game is application of resources, just as placement of ordnances was the name of the game in the Persian Gulf war," said James Reider of Arthur D. Little, Inc. as he addressed the Second Annual Food Executives International Congress sponsored by the Food Executives International Foundation, Inc. mid-March in Washington, DC.

The successful CEO must direct precise allocation of corporate resources. Financial pressures have already caused many food companies, such as Campbell Soup and Borden, to downsize their operations. Obviously, tighter finances will dictate how a company manages its personnel, structures itself, sells, promotes, and advertises; and so it becomes imperative to know who is buying your products and why, Reider said. And additionally, who is not buying your product and why.

The food and beverage industry appears ready to meet the challenge of a more competitive market with increased efforts to exploit export opportunities. For the first time in 1991, the *Industrial Outlook* compiled information on international competitiveness, including trade forecasts and export/import data. Traditionally, the U.S. exports low value-added processed foods, such as fats, oils, grain mill products, meat, poultry and fish products, reports the *Outlook*, while importing luxury items, such as confections, bakery goods, alcoholic beverages and gourmet fruit and vegetables.

Although the level of imports in 1990 ($10.7 billion) still outshines exports ($8.8 billion), the DOC expects exports to become a source of growth in the economy. However, it must be noted that exports/imports are not a fair gauge of international economic activity since most large companies will build plants or partnerships overseas rather than export from the U.S. Significant interest in overseas operations have been shown by food processors:

- Probably in response to Cereal Partners, the General Mills partnership with Nestlé, Kellogg's has acquired a small Italian cereal company to bring its total European plant count to six. The Battle Creek, MI-based company's European cereal businesses have posted volume increases of seven to ten percent per year, according to *Value Line Investment Survey*, New York, NY. International profits are expected to approach U.S. operations as scale and efficiency increase and foreign pricing become more aggressive, *Value Line* adds.
- In late 1990, Borden signed a joint venture agreement with a Hungarian partner to produce sweet snacks and operate retail bakeries, with four outlets slated for Budapest in 1991. The company also ended a local partner-

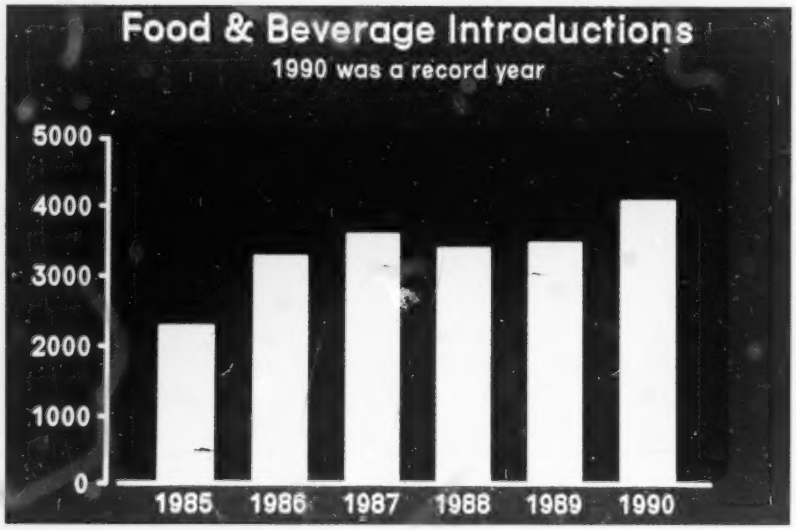
Top 21 U.S. Food Processing Firms, 1991

Rank	Company	Worldwide food sales ($ billion)
1	Philip Morris	29.8
2	ConAgra	15.3
3	RJR Nabisco	9.9
4	IBP	9.5
5	Anheuser-Busch	9.3
6	Pepsico	9.0
7	Coca-Cola	8.5
8	Cargill	7.9
9	Archer Daniels Midlands	7.3
10	Sara Lee	7.1
11	Mars	7.0
12	Borden	6.5
13	Ralston-Purina	6.1
14	H.J. Heinz	5.9
15	Campbell Soup	5.8
16	Quaker Oats	5.6
17	CPC Int'l	5.1
18	Kellogg	4.7
19	General Mills	4.5
20	Coca-Cola Enterprises	3.9
21	Chiquita Brands	3.8

Source: U.S. Department of Agriculture Economic Studies, Report No. 1.

ship in Japan to establish its own production, distribution and marketing capabilities for cheese, margarine and ice cream. This year, Borden will produce Colombia's first individually-wrapped American process cheese slices.

•Heinz gets about 40 percent of its profits from abroad, according to *Value Line*. Favorable currency translations augmenting good international performance is helping boost the bottom line. The Pittsburgh-based company has posted earnings gains for 26 straight years.



Last year food and beverage introductions were at an all-time high at 4,132 (total SKUs were 10,640). (Source: Marketing Intelligence Service, Naples, NY.)

•Hormel acquired Parkin Food Products, Ltd., in England to produce its *Micro Cup* shelf-stable products.

•For the first time, profits from CPC International's European operations are expected to exceed its U.S. operations.

Some firms have become so globally-oriented that their national sovereignty becomes moot. Overseas operations comprise more than half the sales of companies such as Nestlé, Unilever, Coca-Cola, CPC International, Grand Metropolitan and Seagram.

In addition to foreign investment, there is a growing trend for food companies to forge product licensing agreements. Products such as *Spam*, *Lowenbrau*, *Miller Lite* and *Cadbury* are household names in both the U.S. and Europe.

Mergers and acquisitions

The frenetic merger and acquisition activity that became a hallmark of the food processing industry of the 1980s dropped by almost half from 1989 to only 66 in 1990, according to the Food Institute, Fairlawn, NJ. However, this appears to be a temporary lull since merger activity in other food industry segments continues to rage at levels similar to or higher than 1989. Mergers and acquisitions continue at a rapid pace for: dairy processors, diversified firms, meat packers, poultry processors, snack processors, soda bottlers, seafood processors, foodservice firms and food retailers, according to the Food Institute.

A notable acquisition that occurred in 1990 within the food processing category was the $1.3 billion purchase of Beatrice by ConAgra that created the nation's Number 2 food processor, right behind Kraft General Foods.

Meanwhile, food processors such as Borden and Campbell continue to downsize:

•Campbell Soup Co. sold Domsea Farms aquaculture operations to Dory Seafoods. It also sold all of its holdings in DNA Plant Technology, a biotechnology firm Campbell helped found in the mid-eighties.

•In 1990 Borden sold four dairy plants as part of its plan to deemphasize dairy products and zero in on its primary businesses which included acquiring two pasta and pasta sauce operations and one snacks operation. Borden is launching into phase 2 of its growth plan to become a low-cost producer in each of its businesses by closing about 65 out of 265 plants by 1992, cutting its workforce by 15 percent, consolidating production facilities and adding 11 hyperplants.

Meanwhile other companies continued to acquire regional brands:

•Hershey announced purchase of American Italian Pasta of Missouri, which is a little less than half the size of Ronzoni, which Hershey picked up last February.

Industry	Export	Import
Red meat	4,113	3,052
Canned foods	1,910	1,518
Frozen foods	554	1,089
Liquor	290	1,328
Poultry slaughter	714	27
Bread, cake	106	245
Cheese	36	512

Source: U.S. Industrial Outlook.

•Dean Foods continues to snap up strong regional brands to milk growth in the mature dairy industry.

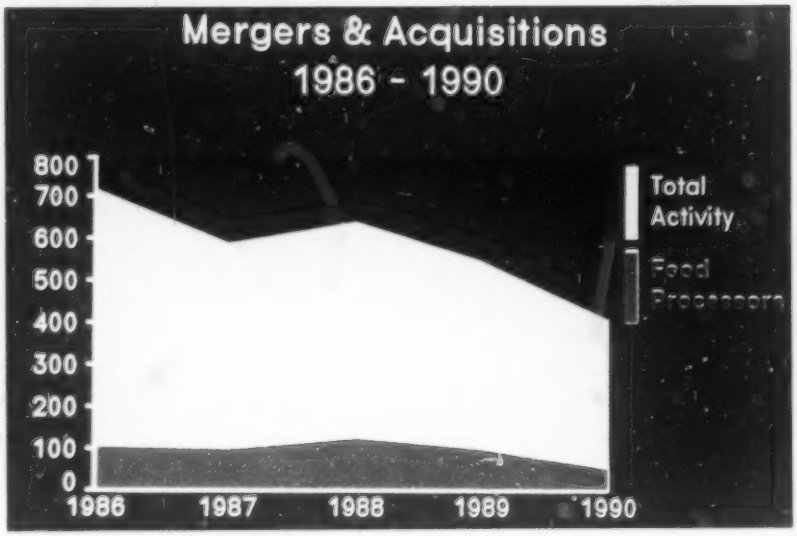
Slotting fees

Most companies prepared for the recession before it even got here by streamlining operations through plant closings, layoffs, selling off operations and cutbacks in R&D. Tighter allocation of resources combined with the computer age have spawned retail trends such as slotting fees. Last year alone, a record 4,132 new food and beverage product introductions elbowed their way onto already-crowded grocery store shelves. Food companies must pay slotting fees to get on the shelf and these fees have increased 40 percent in the past two years, according to Ron Weber, president, Weber Management Consultants, Inc., Huntington, NY. A manufacturer can pay anywhere between $30 to $50, or in rare cases, $150 per product per store in cash or gifts to assure placement on the grocery shelf, he added.

"Much of the impetus behind rising slotting fees is the need to make money to service heavy corporate debt" resulting from shrinking margins and the impact of mergers and acquisitions, said Weber. Large companies may be able to afford the slotting fees, while small regional manufacturers are being choked off grocery shelves by the expense.

Weber cited a recent study commissioned jointly by the Grocery Manufacturers of America and the Food Marketing Institute which found it costs a grocer about $14 to bring a new product to market while the average per store slotting fee grocers charge is about $36. Basically, grocers charge what the market will bear, he added.

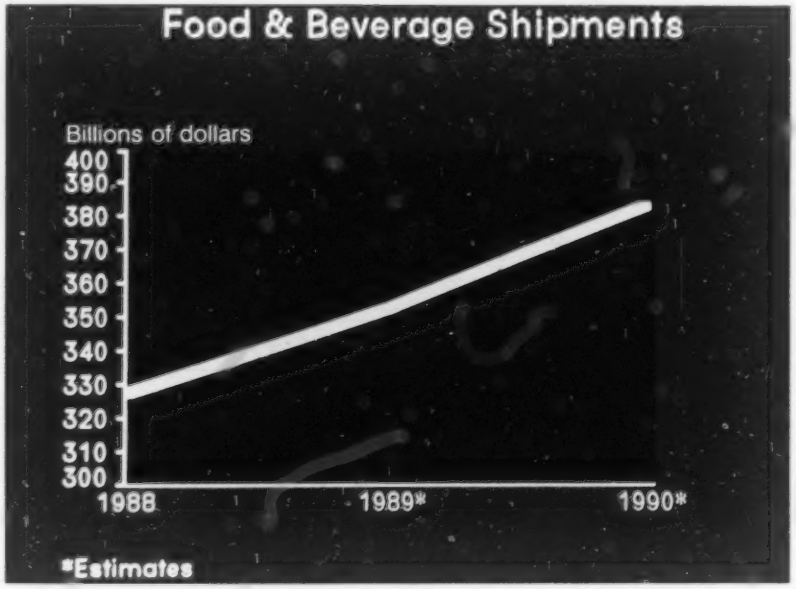
While food companies pay more to get on grocery shelves, sales at the cash register show no sign of suffering from the soft economy, because recession or no, we all must eat. "What people in general are doing more often during the recession is stocking up on specials (23 percent of those polled), buying more private labels brands (21 percent), and making more impulse purchases when they find bargains (18 percent)," said Mark Hollis, president of Publix Super Markets, Lakeland, FL, referring to *FMI Speaks Report '91*, a study compiled by the Food Marketing Institute (FMI) and presented at its annual convention early in May. He added that repositioning private label brands during the eighties to keep them viable was a wise move since many shoppers are trading down from



1990 saw a dramatic drop in acquisitions within the food industry. (Source: The Food Institute, Fairlawn, NJ.)

national brands.

Food processors can jump on the opportunity presented by shoppers who are going out to restaurants less frequently (23 percent), according to the *FMI Speaks Report.* Well-developed food products can capture abandoned restaurant dollars and hold onto them after the recession. The trend toward the grocery store is apparent by the increase in the average weekly family grocery bill from $74 to $79, according to the report, which says this is the first significant increase since 1985.



It was another record year for food and beverage shipments with sales of $383.7 billion in 1990. (Source: U.S. Industrial Outlook.)

However, food processing companies would be advised not to charge too much for new products designed to replace restaurant fare, since the amount of consumers who said they stopped buying products because they cost too much increased to 84 percent in 1991 from 1984's 72 percent. While consumers keep an eye on their wallets, they also are attentive to the environmental consequences of the foods they buy.

Green Marketing

Almost a third of the shoppers polled by the *FMI Speaks Report*, said they would refuse to buy a product because it is unrecyclable or features unnecessary packaging. A little more than half of those polled said they would be more likely to buy a food product made from recycled materials, according to FMI.

Keeping environmentalism in mind, food companies have formulated policies regarding recycling. Hormel is using recyclable materials on the outer jackets of *Top Shelf* entrees and other products. R.L. Knowlton, president and CEO of Hormel, pledged that containers that are not completely recyclable will undergo packaging changes to address the solid waste issue.

Quaker has committed itself to source reduction and uses recycled paperboard in its cereal boxes and recycled glass and aluminum for *Gatorade*.

Meeting the challenge

This year consumers are expressing greater interest in "green" products and companies will be tested to see if they can offer real solutions rather than advertising hype. The Federal Trade Commission is examining the use of environmental terms in advertising and food companies would be wise to be cautious about making green claims. Irresponsible nutritional claims resulted in legislation demanding expensive labeling changes resulting in expenses that food companies have yet to fully realize. While the FDA has said the cost to change the label per product is only $150, some in the industry claim that figure could actually be as high as $2,000 to account for product analysis. At any rate, food companies must take care to avoid the mistakes of the past by balancing the obligations of responsibility with the demands of a competitive market.

Finally, a world of challenge awaits both large and small companies who dare to think global. With a saturated market at home, companies are discovering there's a big world out there. Look to the following pages, to find out just what areas of the food industry are ready for the challenges that wait ahead. ▲

REFRIGERATED FOODS

Sara Lee developed but has not yet rolled out *Carry Out Classics*, a line of fresh refrigerated entrees. Initial inventory was sold frozen at the Sara Lee outlet store in Deerfield, IL.

Several national food processors tried over the past five years to enter the chilled-foods market with fresh, refrigerated entrees. Examples: Campbell Soup (*Fresh Chef, Fresh Kitchens*); Sara Lee subsidiary Emmber Brands (*Tonight's Choice*); General Foods (*Culinova*); Carnation (*Contadina* pastas); Kraft (*Chillery, Fresh Creations* and *DiGiorno* pastas); Nestle (*FreshNes*).

Only Carnation and the mega-merged Kraft General Foods (KGF) remain: Carnation with *Contadina* in national distribution; KGF with *DiGiorno* approaching national distribution and *Fresh Creations* in regional test markets. All three products are in modified-atmosphere (MAP) packaging. Because of their longer shelf lives (40 days for *Contadina*), the pastas can be distributed via supermarket chain warehouses. But most chilled foods have shorter shelf lives, requiring direct store-delivery (DSD) and tight refrigeration control.

"The market for prepackaged refrigerated meals can best be described as embryonic," reports FIND/SVP (New York City) in a new (1991) study. "In the overall convenience-foods market, [this] segment is the most underdeveloped and most fragmented—primarily because it offers the most difficult area for food processors to achieve broad-based success."

Major reason: no infrastructure for nationwide distribution of chilled foods exists, leaving the market mainly to smaller food processors equipped for regional DSD with their own refrigerated trucks. Examples: Grace Culinary Systems (Laurel, MD), which packs Marks & Spenser-brand refrigerated entrees with seven-day shelf life (including distribution time) for Marks & Spenser-owned King Supermarkets in New Jersey; Vie de France Culinary (McLean, VA), which distributes refrigerated *sous vide* products to mid-Atlantic markets (but frozen elsewhere throughout the country); Keyfresh Foods (West Chester, PA), which supplies a number of Wawa convenience stores with MAP-packaged fresh entrees and reportedly developed MAP entrees for a McDonald's market test; Chicago Fish House, readying a line of MAP-packaged fresh seafood products with 14-day refrigerated shelf life.

Meanwhile, Orval Kent—with a nationwide refrigerated distribution system in place for its fresh salads—introduced in May, 1990, its cook/chill-processed *Chilled Case Cuisine* line of fresh entrees with a 30-day shelf life for the volume-feeding and service-deli markets.

As reported last month in *FE*, chilled-foods production technologies are in place; HACCP programs have been developed and are being refined. Outlook: Chilled foods will continue to be a fragmented market until a national distribution infrastructure can be established, perhaps within two years.

Marks & Spenser-brand fresh refrigerated entrees are produced for Kings Supermarkets in New Jersey by Grace Culinary Systems (Laurel, MD).

STATE OF THE FOOD INDUSTRY

SHELF STABLE FOODS

Despite an outcry for "fresh, fresh, fresh," the American consumer's affinity for canned and shelf stable meals continues to march forward. The Department of Commerce reports in the *1991 U.S. Industrial Outlook* that the current-dollar value of the production of canned fruits, vegetables, and processed food specialties grew six percent to $30 billion in 1990, approximately a $2 billion increase over 1989's production, valued at $23.3 billion.

Industry data:				Percent change	
	1989[1]	1990[1]	1991[2]	1989-90	1990-91
Value of shipments	28,369	30,067	–	6.0	–
Value of shipments (1987$)	25,727	26,442	26,839	2.8	1.5
Product data:					
Value of shipments	27,245	28,850	–	5.9	–
Value of shipments (1987$)	24,712	25,413	25,794	2.8	1.5

[1]Estimate.
[2]Forecast.

Source: U.S. Department of Commerce: Bureau of the Census; International Trade Administration.

Estimated sales in 1990 for the microwaveable bucket market reached $391 million as the push for convenience continues.

The areas of this sector experiencing the most significant growth included assorted canned ethnic foods, salad dressings, baby food, tomato products and related sauces, dried soups, and aseptically packaged foods. Baby food sales volume has shown the most stellar growth out of this group, increasing to just under 12 percent in the past three years. The Department of Commerce reports that this rise is partly due to the introduction of new products low in salt and those with no sugar added.

However, as production values and shipments increase, Commerce reports that the "fresh trend" has caused changes in consumption of canned fruits and vegetables. Total per capita consumption of these products has declined in the past 10 years while consumption of fresh and/or frozen products has increased. For example, per capita consumption of canned fruits declined from 20.8 percent of total fruit consumption in the 1980-84 period to 18.4 percent in the 1985-88 period. Fresh fruit consumption rose from 68.8 percent to 70.3 percent during the same time period.

The microwaveable foods category, as part of the large shelf stable food sector, has been growing steadily during the last few years as convenience-hungry consumers gobble up a variety of products that require minimal preparation and minimal clean-up. Convenience and the increasing penetration of the microwave (now estimated to be over 80 percent in U.S. households) are the two main factors spurring growth in this area.

FIND/SVP estimates that sales of microwaveable shelf stable products reached $391 million in 1990 and forecasts that sales for the category will increase to over $1 billion in 1994, at a compound annual rate of 41 percent. But, the market does face a few challenges, Peter Allen, vice president, market research, reports. A large number of consumers have not used a microwaveable shelf stable product and surprisingly, many do not know they exist. Retailers, in order to gain more sales, need more experience on how to best promote and merchandise these products to a society demanding more convenience in food. And the price of these products is somewhat higher than those packaged in traditional forms (cans), affecting sales growth in this area. The technologies behind these products are still considered new and expensive, therefore processors and packagers must price the products accordingly in order to recapture some of these costs.

STATE OF THE FOOD INDUSTRY

MEAT & POULTRY

According to the *1991 U.S. Industrial Outlook*, the Department of Commerce reports that in 1990, current-dollar shipments by the meat and poultry products industries rose about 10.7 percent, to $97.2 billion. In 1990, the red meat industry accounted for about 78 percent of the value of all meat and poultry industry shipments, down from 81 percent in 1987. Adjusted for inflation, shipments increased 0.4 percent over 1989 totals.

In the past several years, diet and health concerns shifted animal-product consumption toward poultry. Poultry now accounts for 37 percent of all meat consumed, up from 26 percent in 1981, reports Commerce. Poultry products also cost less which positively affects sales; these products are often used more frequently than red meats in convenience foods and frozen items. During 1989-90, the average wholesale prices for beef and pork were $1.18 and $0.68 per pound, respectively, compared to $0.56 for chicken and $0.67 for turkey. Retail prices of these products: beef, $2.46 per pound, pork, $1.94, and poultry, $1.00 to $1.50.

A significant score for poultry occurred in 1990—for the first time, per capita consumption of chicken and turkey equaled that of beef, an estimated 63.9 pounds based on trimmed weight of the products. Per capita consumption of poultry increased 15.6 percent between 1987 and 1990, says Commerce, while beef consumption declined 7.7 percent during the same time period.

But, says Marketing Intelligence Service Ltd. (Naples, NY), don't write beef out just yet. The industry's advertising and changes in the way beef is grown, trimmed and presented are aimed at making consumers rethink their attitudes. The service reports that beef is still the leader in the number of new packaged meats, meat meals and entrees. In 1987 and 1988, beef lost out to chicken for the most frequent variety of meat introductions. Beef inched ahead in 1989, and in 1990, widened its lead.

And the "lite trend" continued to invade the arena, as a number of new lite introductions were seen last year. Hillshire Farm introduced *Lite Smoked Sausage*, *Lite Polish Kielbasa*, and *Deli Select Thin Sliced Lunch Meats*. Oscar Mayer *Leanest Cuts* include *Smoked Beef*, *Baked Cooked Ham*, and *Smoked Cooked Ham*, and boast a 95 percent fat free composition. *Lite Beef Franks* were introduced by Hebrew National and contain 25 percent less fat than the company's standard beef franks.

"Consumer demand is critical to our industry," said Jim McVey, chairman of the American Meat Institute (AMI) and Oscar Mayer Foods Corporation. "What consumers want, they will pay for, what they don't want, they will ignore. The meat industry responds to these demand signals the same way the rest of the food industry does." But McVey believes the market for supermarket foods and restaurant meals will remain steady, representing a tremendous opportunity for the meat industry.

Some of the lite meat and poultry products introduced last year boast a record-high 95 percent fat free composition.

Year	Beef	Pork	Poultry	Lamb & Veal	Total
1986	74.1	41.6	51.1	2.6	169.4
1987	69.2	41.8	55.3	2.3	168.6
1988	68.2	44.7	57.1	2.2	172.2
1989	65.9	44.3	60.5	2.1	171.8
1990[2]	63.9	42.6	63.9	2.0	172.4

[1]Boneless equivalent for poultry and red meat subtracts all bone and the fat that is normally trimmed before retail sale. In 1990, USDA revised its red meat and poultry consumption series to reflect changes in marketing practices and to facilitate comparisons of red meat and poultry on an equivalent basis.
[2]Estimate.

Source: Food Consumption, Prices and Expenditures, SB-804, U.S. Department of Agriculture, Economic Research Services.

FROZEN FOODS

Year	Total sales	Annual % change
1985	2,378.6	13.5
1986	2,692.6	13.2
1987	3,056.5	13.5
1988	3,466.1	13.4
1989	3,937.5	13.6
1990	4,480.0	13.8

(Source: U.S. Dept. of Commerce; Business Trend Analysts.)

There's no such thing as a "sure thing," but the frozen foods market comes pretty close. As long as the nation's population of singles, working women and dual-income families continues to grow, so will frozen food sales. These groups are driving the market with their demand for innovative, convenient foods. According to the *U.S. Industrial Outlook 1991*, frozen food sales topped $14 billion in 1990 and some segments like dinners and entrees have been steadily increasing 13 percent every year since 1985.

Yet, some segments of the frozen food market are considered "mature"—certain specialties such as juices and pizzas grew a modest six percent. The real growth sectors are breakfast items, ethnic foods and healthy items. Breakfast foods gained 15.2 percent in 1990 to top $700 million in sales, competing successfully against their fast-food counterparts. Ethnic dinner sales topped $1 billion, according to figures published by Business Trend Analysts (Commack, NY). Although sales of Mexican entrees still tally over $500 million a year, Italian dishes are posting big gains. Italian entrees total 36 percent of ethnic sales, up from 29 percent just six years ago. Oriental entrees are also gaining quickly, as consumers clamor for more variety in product choices.

Healthy frozen entrees like Campbell's newly renamed line, account for more than a quarter of total frozen entree sales, and sales for this category should steadily increase for the next five years.

But the big story continues to focus on healthy frozen dinners and entrees. ConAgra virtually created this segment with its *Healthy Choice* line, now accounting for $300 million in annual sales and fully 8 percent of the *entire* $3.9 billion frozen dinner/entree market. Currently, 28 percent of frozen dinners are classified as "healthy,"; that number is expected to reach 40 percent by the year 2000.

Other industry giants are restaging their frozen dinner lines to compete more effectively with ConAgra. Campbell's changed the name of its *LeMenu LightStyle* line to *LeMenu Healthy*, while reducing its sodium content. And Kraft General Foods is test marketing *Kraft Alternatives*. The line is low in calories, cholesterol and fat, mimicking *Healthy Choice* right down to the green box.

The remaining 75 percent of the frozen entree market is dominated by Stouffer's "red box" products and a few other brands, but activity within the category is sluggish. Clorox is hoping to shake up the segment with its introduction of *Hidden Valley Ranch* entrees, and is promoting the line's "you'd swear it was fresh" taste.

Frozen dinner sales may be healthy, but seem cool in comparison to frozen dessert sales. Posting a 69 percent gain in 1990, frozen desserts captured 9 percent of the total frozen market (excluding sales of traditional ice cream). Sales of frozen yogurt, *Simple Pleasures*, *Kraft Free*, as well as fully-prepared heat and eat desserts from Pepperidge Farm and Weight Watchers, contributed to the astounding gain. In fact, the health-conscious segment accounted for two-thirds of the $215 million frozen dessert market in 1990 and forecasts show steady growth through the next five years.

STATE OF THE FOOD INDUSTRY

BREAKFAST FOODS

Kellogg's recently boarded the rice bran bandwagon with the introduction of *Kenmei* cereal.

Contrary to last year's predictions by the U.S. Department of Commerce, in 1990 the cereal breakfast food industry dipped in both shipment and consumption. According to *U.S. Industrial Outlook*, the estimated value of product shipments decreased one percent, while per capita consumption dropped 2.5 percent in response to the 1989 retail price increase of 9.2 percent.

Oat product cereals fared the best in last year's climate, with a consumption increase of 3.1 percent. Rice cereals fell 2.1 percent in consumption, and hot cereals generally dropped two percent.

The proliferation of oat product cereals in 1989 slowed in 1990 due to recent evidence questioning oat bran's effectiveness in reducing cholesterol. In 1989, 65 percent of the 118 cereals on the market contained the word "oats." In 1990, however, that number dropped to approximately 59 percent.

Rice bran cereals, launched in 1990 under purported evidence that rice bran was even more helpful in reducing serum cholesterol than oat bran, faced difficulty in matching the clamor for oat products that arose in 1989. Kellogg Co., Quaker Oats Co., and Ralston Purina Co. all released rice bran cereals to a less-than-enthusiastic consumer response.

An interesting cereal trend in 1990 was the growth of private label brands. Manufactured primarily by Ralston-Purina, these have doubled their share in the last four years, and now battle Quaker Oats for the number four position. And by offering lower-priced versions of Kellogg's cereals, the private label brands are taking a bite out of Kellogg's number one ranking.

Marketing strategies in 1990 attempted to capture the growing market of children from ages five to 15 years. Presweetened cold cereals with product names licensed from movies or television shows reportedly appeal to this market; of the top 99 cereals, 12 portrayed licensed characters on the box. Particularly successful in this area was *Teenage Mutant Ninja Turtles* cereal.

Hot cereal manufacturers also attempted to capitalize on the growing youth market in the hopes of bolstering sagging hot cereal sales. General Mills, for example, offered *Undercover Bears* Oatmeal, which when heated reveals colorful, chewy, flavored bears. *Undercover Bears* is General Mills's first new product introduction since Oatmeal *Swirlers*, another youth-targeted innovation, debuted two years ago.

The outlook for 1991 indicates that cereal consumption will increase by one percent overall, with cold cereal consumption rising by one percent and hot cereal by .7 percent. This projection is based on the assumption that retail price increases will be not be as great as those seen in 1989 and 1990.

Product Shipments of Cereal Breakfast Foods
(in millions of dollars)

	1987	1988	1989[1]	1990[2]	1991[2]
Ready to serve	4,711.1	5,246.0	5,940.7	6,385.0	6,758.0
Corn items	1,302.3	1,479.2	1,669.4	1,786.0	1,869.0
Wheat items	1,359.6	1,544.2	1,756.5	1,892.2	1,992.2
Oat products	706.9	802.9	915.9	991.5	1,078.1
Rice products	518.1	588.5	619.2	638.3	634.7
Mixed grains	824.2	831.2	979.7	1,077.0	1,194.0
Hot cereals	353.4	403.5	54.7	469.1	500.3
Oatmeal	120.5	136.8	150.7	154.5	161.1
Instant	163.7	185.9	220.7	234.4	256.6
Farina	60.2	68.3	71.4	67.9	9.9
Mixed grain	9.0	12.5	11.9	12.3	12.7
Unspecified items	15.9	17.9	20.0	21.5	22.8
Total	5,080.4	5,667.4	6,415.4	6,875.6	7,281.1

[1]Estimate.
[2]Forecast.
Source: U.S. Department of Commerce; Bureau of the Census and International Trade Commission.

SNACK FOODS

	1990	% change from 1989
Potato chips	4,124	+5.3
Tortilla chips	2,238	+6.4
Extruded snacks	1,090	+7.6
Corn chips	601.5	−5.4
RTE popcorn	428.1	+16.2
MW popcorn	898.3	+9.3
Pretzels	622.4	+11.6

Source: 1991 Snack Food Association State of the Industry Report.

Eagle Snacks, Inc. jumped into the tortilla chip market with its Nacho Cheese and Ranch-flavored tortilla chips in 1990.

America loves to snack and nowhere is this more apparent than in snack food sales: 1990 snack sales totaled $12.67 billion, up 6.2 percent from 1989, according to the Snack Food Association (SFA), Alexandria, VA. Translated into pounds, that comes to 4.72 billion pounds, an increase of 3.5 percent over 1989, according to SFA.

The most dramatic gains were made by variety-pack snacks, which jumped in sales by close to 51 percent to $321.2 million, followed by ready-to-eat (RTE) popcorn which posted gains of 16.2 percent with sales of $428.1 million, and pretzels which rose 11.6 percent with sales of $622.4 million, reports SFA. The popularity of popcorn and pretzels can be attributed to consumers perceiving them as being healthier since they are not fried and have relatively low fat levels.

Big losers in the snack category were party mixes which dropped in sales by 23.4 percent from 1989 to $120.5 million and unpopped popcorn, which dropped 15 percent to $157.5 million, according to SFA. Interest in party mixes has gone stale while consumers bypass unpopped popcorn to scoop up more convenient RTE and microwavable popcorn.

Potato chip sales recouped from the potato shortage of 1989 to post a healthy sales increase. Borden introduced *Krunchers!*, a premium potato chip, which will grow from initial distribution in New England and the Mid-Atlantic states to national distribution in 1991. Other strong performers in 1990 were tortilla chips, extruded snacks, meat snacks, and pork rinds.

The $2.2 billion tortilla market has become more competitive since Eagle Snacks, Inc. of St. Louis threw its hat into the ring with *Nacho Cheese Tortillas* and *Ranch-flavored Tortillas*. Tortilla chips had long been the domain of Frito-Lay, Inc. of Plano, TX, but now the snack food giant dominates the light chip market which it launched last year with a line of chips featuring one-third less oil than regular chips.

Frito-Lay launched *Sunchips* multigrain chips early this year after market tests showed baby boomers wanted an alternative to potato, corn and tortilla chips, according to Dave Gustin, senior vice president of marketing. Sunchips are a blend of wheat, corn and other grains fried in either canola or sunflower oil.

The Plano-based firm is also test marketing *Suprimos*, a wheat-based, wavy snack (in Cool Onion and Cheddar & Jack flavors) aimed at active teens and young adults. It is the first wheat-based snack from Frito-Lay and is being test marketed in upstate New York.

Doritos Cracker Crisps, a lighter, crisper version of a cracker made from corn (in Cool Ranch and Nacho Cheese varieties), is being test marketed in Indiana.

Snack nut sales dropped by 3.8 percent to $1.3 billion. The Blue Diamond Almond Research Center has been concocting some interesting variations of almond flavors which may ignite new interest in the segment. Chris Heintz, senior research scientist at Blue Diamond mentioned some of the latest flavors including: sour cream & onion whole almonds, salt & vinegar-flavored almonds, chili with lemon almond splits and nacho almond halves. The latest snack mix in the foodservice area is *Confetti*, Heintz added, a blend of sour cream & onion almond splits, peanuts, pretzels and sesame sticks.

February was the third annual Snack Food Month promotion, which many snack food companies said increased sales as much as 20 to 50 percent. The promotion is coordinated by SFA, which helps snack manufacturers cash in on one of America's great pastimes—snacking.

CONFECTIONS

Despite the diet craze, Americans are still showing a penchant for sweets as per capita consumption of chocolate and nonchocolate rose in 1990.

Don't worry about having a sweet tooth because most Americans fall into the same category. Business Trends Analysts (Commack, NY) reports the U.S. market for candy, nuts, and chewing gum totaled $12 billion in 1990. By 2000, the firm estimates that sales are expected to increase to a little over $21 billion for an average annual growth rate of 6.0 percent.

In a segment-by-segment breakdown, BTA says that candy sales in 1990 exceeded $9 billion. Sales are projected to increase 6.2 percent on the average annually and reach $16 billion in the year 2000. Chewing gum racked up $838 million in sales in 1990 and by 2000, sales should increase to $1 billion at an average annual rate of 2.5 percent. Total sales of nuts and other confectionery items reached $2 billion in 1990. By 2000, after an average annual increase of 5.9 percent, this segment should reach $3.8 billion in sales.

Economic conditions seem to affect the confectionery market more than other areas of the food industry, so during economic slowdowns, consumers normally cut back on what is considered a nonessential item. But, the market is not taking the present downturn lying down, and has initiated a five-year promotional campaign to increase sales at the register.

Nor have product introductions during 1990 abated because of economic conditions. In fact, the types of products and marketing ploys are getting more imaginative. Marketing Intelligence Service (Naples, NY) describes the label of *Choc Daniel's Tennessee Jelly Bean Chocolates* as a "knock-off of a Jack Daniel's whiskey label." These chocolates are distilled and bottled by the Jack Company, Inc. and are pegged as old time gourmet quality. The label on the container tells the consumer the candy is "100 proof sweet tasting."

Sports figures are another means of promoting the confectionery market to consumers who can worship their favorite sports hero and satisfy their sweet cravings at the same time. Last year saw the introduction of the *Kelly Krunch*, a milk chocolate candy bar named after Jim Kelly, quarterback of the National Football League's Buffalo Bills. The 2.25-ounce bar sells for 99 cents and a percentage of sales goes to the Kelly for KIDS Foundation in Western New York state.

In 1991, says the Department of Commerce, the inflation-adjusted value of candy and other confectionery product shipments is projected to rise 1.8 percent. Total U.S. candy consumption is expected to exceed 4.7 billion pounds, rising almost two percent over 1990 levels. However, looking at long-term prospects for the industry, the market is expected to downsize through mergers and acquisitions while, at the same time, emphasizing new product development targeted at an aging population. Observers also predict that health consciousness on the part of the American consumer will affect new products entering this market.

Industry data:				Percent change	
	1989[1]	1990[1]	1991[2]	1989-90	1990-91
Value of shipments[3]	7,723	8,117	8,637	5.1	6.4
Value of shipments (1987$)	7,412	7,551	7,684	1.9	1.8
Product data:					
Value of shipments	7,825	8,240	8,784	5.3	6.6
Value of shipments (1987$)	7,510	7,665	7,815	2.1	2.0

[1]Estimate.
[2]Forecast.
[3]Value of all products and services sold by establishments in the candy and other confectionery products industry.

Source: U.S. Department of Commerce: Bureau of the Census; International Trade Administration.

BAKERY PRODUCTS

Sesame Street's Cookie Monster is reveling in munchiemania as cookies continue to outpace the overall bakery segment in shipments and per-capita consumption. According to *U.S. Industrial Outlook 1991* (U.S. Dept. of Commerce), the value of cookie shipments rose to nearly $4.1 billion in 1990, up an astounding 21 percent from $3.36 billion in '88, and will reach approximately $4.5 billion this year.

Per-capita cookie consumption grew from 12.2 to 13.7 lbs. over the same two-year period and will reach 14.4 lbs. by '92.

The reason says the Commerce: "Companies are targeting many new premium-brand cookies, often containing honey and fruit juices as alternative sweeteners, at health-conscious consumers," while "replacing tropical oils and white flour with soybean oil and whole-wheat flour."

According to *Industrial Outlook*, the 1990 value of bakery-product shipments totaled $24.3 billion, up 6.7 percent from '89 in current dollars and 1 percent when adjusted for inflation. Cookies and crackers led with a 9 percent growth rate; bread, cake and related items followed at 6.2 percent rate.

New products accounted for part of this growth: Marketing Intelligence Service (Naples, NY), reports 577 new bakery products (1,382 SKUs) werelaunched last year, compared to 453 (1,103 SKUs) in 1989 (*FE* Mar., '91). Commerce reported that 175 bakery products introduced in 1989 bore health-claim labels; Marketing Intelligence reported that that nearly doubled to 317 last year.

Frozen bakery products have been sliding since 1982, with per-capita consumption falling another 4.9 percent last year, says the Commerce Department. Reasons: consumer concerns about diet and preparation time, and growing competition from fresh products offered by in-store bakeries.

Per-capita consumption of all bread products rose 1.5 percent in '90, with white-pan bread accounting for 56 percent. The "lite bread" trend launched in '89 with white was extended last year into variety breads such as rye and wheat. Per-capita consumption of rolls and sweet goods each rose 2.6 percent, while bagel noshing soared 10.5 percent.

The 1989 surge in ingredient and packaging costs abated somewhat last year as labor costs rose 3.5 percent and overall producer prices rose 4.8 percent. Consumer prices, however, rose 6.4 percent.

Outlook: Constant-dollar value of shipments will rise 1.1 percent this year, says the Commerce Department, with cookies and crackers leading the way at 3.5 percent as frozen products (except for soft cakes) decline another 6.3 percent. Commerce predicted that rising fuel costs would slow growth in this energy-intensive industry, but stabilizing oil prices following The Gulf War may give the industry a boost.

	1989[1]	1990[1]	1991[2]	1992[2]
Bread	49.2	49.9	50.5	51.3
Rolls	22.3	22.9	23.5	24.0
Sweet yeast goods	3.9	4.0	4.2	4.3
Soft cakes	7.5	7.8	8.0	8.3
Pies	1.7	1.7	1.7	1.7
Cake-type donuts	1.3	1.3	1.2	1.2
Cookies	13.2	13.7	13.9	14.4
Crackers	8.6	8.9	9.4	9.7
Pretzels	1.2	1.2	1.3	1.4

[1]Estimate.
[2]Forecast.
Source: U.S. Department of Commerce.

Vie de France introduced three whole-grain, high-fiber European hearth breads in frozen or par-baked form for restaurants and bakeries. (Source: Vie de France.)

SEAFOOD

Pollock landings soared 34 percent, reflecting surging surimi markets and new foods such as "crabcakes." (Source: The Berelson Co.)

According to preliminary data from the National Marine Fisheries Service (NMFS), U.S. domestic landings of fish and shellfish reached a record 9.71 billion lbs. valued at $3.57 billion in 1990. This is up from 8.46 billion lbs. valued at $3.24 billion in '89. Most of the gain came from Alaskan pollock, where nettings soared 34 percent from 2.36 billion lbs. in '89 to 3.16 billion lbs. last year, reflecting the surging surimi market.

	1988	1989	1990[1]
Fresh/ Frozen	10.2	10.5	–
Canned	4.7	5.1	–
Cured	0.3	0.3	–
Total	15.2	15.9	16+

[1]Estimate.
Notes: 1989 figures reflect surimi production; 1988 figures do not include surimi. NMFS is currently revising per capita consumption figures and cautions that figures cited above may soon be revised downward.
Sources: U.S. Department of Commerce; National Marine Fisheries Service.

Per-capita consumption figures for 1990 were not yet available at presstime; NMFS was revising consumption figures and cautions that its earlier per-capita estimates for 1989 and 1990 might be revised downward. According to earlier data, 1989 per-capita consumption reached a record 15.9 lbs. as consumers reduced red-meat consumption in favor of fish and poultry. Per-capita consumption of canned seafood, which had declined in 1987 and '88, jumped 0.4 lbs. in '89 due mainly to tuna, which accounted for 25 percent of overall seafood consumption.

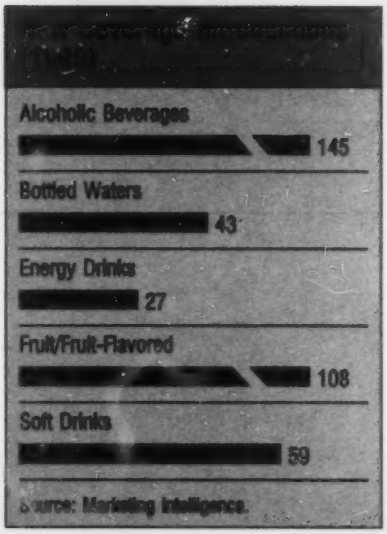
Other consumption categories in '89: Groundfish (29 percent); other finfish (19 percent); shrimp (14 percent); mollusks and other shellfish (11 percent); crustaceans (3 percent). The industry's trade deficit fell as food exports rose to $1.18 billion and imports dropped to $2.52 billion.

According to USDA, 360 million lbs. of farm-raised catfish (live weight) were produced last year, up 5 percent from '89, and grower sales reached $323 million, up 20 percent. Trout growers reached $76.9 million in sales, up 7 percent from '89.

Other forms of U.S. aquaculture are fledgling industries faced with technological, environmental, regulatory and competitive-import problems. U.S. farm-raised salmon production in 1989 (latest year available) was between 8 and 9 million lbs. (as compared to 733.1 million lbs. valued at $612.3 million landed domestically, plus $300 million worth of salmon imports in 1990). About 2 million lbs. of shrimp were produced on farms last year, a mere fraction of the 346.5 million lbs. landed domestically (down 5 million from '89) and the 544 million lbs. imported. Alligator production zoomed from nearly zero in 1979 to 83,000 in '89, while cultured crayfish production reached 15.6 million lbs. of edible weight in '89, up 100 percent in 10 years.

National Fisheries Institute (NFI) set a seafood consumption goal of 20 lbs. per capita by the turn of the century, meaning consumption must rise from 3.9 billion lbs. in '89 to 5.4 billion lbs. by 2000. NFI's supply outlook: Shrimp—with stable wild harvests and aquaculture in place (mainly abroad)—offers the best promise, with finfish such as salmon also benefiting from aquaculture, although halibut and swordfish landings will decline. Supplies of groundfish (such as pollock, flounder and cod) will depend on improved processing technologies, fisheries management and use of underutilized species such as hake. Tuna demand will have to be more satisfied by skipjack and less by the albacore and yellowfin varieties.

BEVERAGES



The beverage industry today is an amalgam of many niche industries (some of which did not exist a few years ago) and perennial products like soda and distilled spirits. One thing characterizes the industry as a whole: new and unusual products are introduced every day, each hoping to capture the consumer's fancy and spawn the next big trend.

A perfect example is the category of "New Age" beverages, where just about anything goes—and sells. Products like bottled herbal teas, natural sodas and coffee-flavored seltzers cater to specific, generally upscale, markets. As a category, New Age beverages accounted for $2.2 billion in 1990, representing 5 percent of the non-alcoholic beverage market.

Another category that has shown tremendous growth in the last few years is bottled water. Now a $2 billion market, bottled waters became popular as Americans sought an alternative to tap water. Both still and carbonated waters replaced alcohol or soft drinks for many. And even though competition has driven prices down, bottled water sales are expected to grow only 10 percent this year.

Despite tremendous sales figures, not everything is rosy for bottled waters. The FDA has been under fire from the General Accounting Office (GAO) for allowing "potentially harmful contaminants [in bottled water] that are not allowed in public drinking water." The GAO is demanding regulation after discovering that several regional bottled water brands contained millions more bacteria per milliliter than the FDA's standards mandate.

Controversy is nothing new to the beverage industry. In the most recent chapter of the cola wars, Pepsi accused Coca-Cola of giving preferential treatment to McDonald's Corp. at the expense of Coke's other restaurant clients. So far, Pepsi holds 26.3 percent of fountain sales, inching toward Coke's share of 59.7 percent.

Both Coke and Pepsi moved retail prices up 2 to 3 percent, but consumers seem to be taking the increases in stride. Bottled soft drink sales rose 6.4 percent in 1990 to reach sales of slightly more than $26 billion. Soft drink growth rates are ahead of inflation, suggesting that industry profitability will continue through the mid-1990s. The diet drink business is doing even better—10 percent increases are expected this year. *NutraSweet*'s expiring patent will drive diet drink prices down, probably increasing sales in the process.

The picture is not as bright for alcoholic beverages. In 1990, this segment of the industry totalled $23.1 billion in sales. So far in 1991, consumer spending on alcoholic beverages is down, due to the combined effects of Federal excise taxes and moderation messages. Production in 1991 has also dropped considerably. But this industry's future may flourish overseas—alcoholic beverage exports rose 19 percent in 1990, with Japan emerging as a major customer.

"New Age" beverages such as *Malibu Teaz* posted category sales of $2.2 billion in 1990. (Source: Marketing Intelligence.)

DAIRY PRODUCTS

Sugar-free chocolate milk sweetened with *NutraSweet* was introduced in 1990. (Source: Wisconsin Milk Marketing Board.)

Except for the cheese segment, fat is the major factor impacting the dairy industry. In both constant-dollar shipments and per-capita consumption, whole milk continues to slide as lowfat milk, skim milk and yogurt gain. Butter continues its long-term decline in favor of margarine and blends. Ice-cream consumption dipped 0.6 percent last year as frozen-yogurt soared 45.4 percent.

Sparked by Italian types, however, per-capita consumption of natural cheese grew 9.1 percent in 1990, with Mozzarella alone gaining 12.3 percent due to the popularity of pizza, and cream cheese 15 percent because of the bagel boom. Processed cheese consumption declined 3.7 percent.

According to *U.S. Industrial Outlook 1991* (Department of Commerce), dairy-product shipments totaled $48.5 billion in 1990, reflecting no change from '89 when adjusted for inflation. Milk prices rose for the second consecutive year, reducing Commodity Credit Corp. purchases by 22 percent and pushing government inventories up only 1.2 percent.

However, according to USDA, that situation changed rapidly as milk prices plunged late last year to lose $3 per cwt. by the first quarter of '91 as compared to last year's first quarter, forcing CCC to purchase 46.5 million lbs. of cheese, 142.2 million lbs. of nonfat dry milk and 197.6 million lbs. of butter during the first quarter of this year.

According to an October, 1990 study by FIND/SVP (New York City), sales of ice cream and frozen desserts reached $9.4 billion in 1990, up 3.5 percent from '89. Ice cream accounted for 55 percent of category sales ($5.2 billion) but has slid marginally since 1986, while frozen yogurt soared to 23 percent of sales ($2.2 billion) at a compound annual rate of 26 percent since '86. Ice milk accounted for 12 percent of sales ($1.1 billion), growing 7 percent per year since '86. FDA is reviewing proposed new standards of identity for ice cream and may also soon define "frozen yogurt."

Dairy outlook: constant-dollar shipments will decline 1.5 percent in 1991, says Commerce. Milk prices may fall but increased energy costs will boost costs. Collective per-capita consumption of lowfat milk, skim milk and yogurt will rise 2.7 percent; per-capita consumption of cheese will level off, but Italian varieties could gain 3.8 percent.

FIND/SVP sees sales of ice cream (as currently defined) falling 6.4 percent per year to $4 billion by 1994, with redefined ice milk growing by 22 percent per year to $2.5 billion and frozen yogurt by 14 percent per year to $3.7 billion by '94.

Fluid	1988	1989	1990[1]	1991[2]
Milk (lbs.)				
Whole milk	115.2	113.6	112.0	110.4
Lowfat milk	91.4	93.9	96.5	99.1
Skim milk	11.2	11.5	11.8	12.0
Yogurt	—	3.7	4.5	4.7
Cottage Cheese	3.8	3.5	3.4	3.2
Cheese (lbs.)				
Natural	21.7	22.6	24.3	24.3
Processed	8.4	8.1	7.8	7.6
Butter (lbs.)	3.2	2.7	2.6	2.6
Nonfat dry milk (lbs.)	2.4	3.2	3.4	3.0
Evaporated milk (lbs.)	2.1	1.7	1.6	1.6
Ice cream & frozen desserts (gal.)				
Ice cream	3.6	3.4	3.3	3.2
Ice milk	1.4	1.5	1.5	1.5
Frozen yogurt (mfg.)	—	1.3	1.8	2.3
Frozen yogurt (mix)	—	0.2	0.3	0.5
Water ices	0.2	0.2	0.2	0.2
Other frozen desserts	0.2	0.1	0.2	0.2

[1]Estimate.
[2]Forecast.
Source: USDA; U.S. Department of Commerce.